UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/644,900	08/21/2003	Richard Duncan	003797.00620	6418

28319   7590   06/26/2006

BANNER & WITCOFF LTD.,
ATTORNEYS FOR CLIENT NOS. 003797 & 013797
1001 G STREET , N.W.
SUITE 1100
WASHINGTON, DC 20001-4597

EXAMINER
SAIN, GAUTAM

ART UNIT	PAPER NUMBER
2176	

DATE MAILED: 06/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>*4/13/06*</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>*1-65*</u> is/are pending in the application.

    4a) Of the above claim(s) <u>*28-33 and 59-65*</u> is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>*1-27 and 34-58*</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____ .

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>*2004-2006*</u>.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____ .

DETAILED ACTION

1)   This is a Nonfinal rejection in response to application filed on 8/21/2003.

2)   Claims 1-27 and 34-58 are rejected in this application. Claims 28-33 and 59-65

are withdrawn (see Election below).

3)   Effective filing date is 8/21/2003.

4)   Assignee is Microsoft.

Election/Restrictions

5)   Restriction to one of the following inventions is required under 35 U.S.C. 121:

    I.   Claims 1-27 and 34-58, drawn to A method for dynamic movement of

        electronic ink with underlying document from one location to another,

        classified in class 715, subclass 530.

    II.   Claims 28-33 and 59-65, drawn to a method for classifying unclassified

        electronic ink, classified in class 715, subclass 512.

5-1)   The inventions are distinct, each from the other because of the following reasons:

    Inventions I and II are related as subcombinations disclosed as usable together

in a single combination. The subcombinations are distinct if they do not overlap in

scope and are not obvious variants, and if it is shown that at least one subcombination

is separately usable. In the instant case, subcombination I has dynamic movement of

electronic ink with their underlying document data from one location to another has

separate utility such as moving a block of data (the electronic ink along with it's

corresponding document data) to another location, whereas subcombination II has

unclassified electronic ink that is to be classified to the corresponding document area

and does not deal with moving data. See MPEP § 806.05(d).

Because these inventions are independent or distinct for the reasons given

above and have acquired a separate status in the art in view of their different

classification, restriction for examination purposes as indicated is proper.

During a telephone conversation with Mr. Thomas Evans (representative of

Applicant) on June 9, 2006 a provisional election was made without traverse to

prosecute the invention of moving/changing and re-rendering of annotations, claims 1-

27 and 34-58. Affirmation of this election must be made by applicant in replying to this

Office action. Claims 28-33 and 59-65 are withdrawn from further consideration by the

examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claim Rejections - 35 USC § 101

6)   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of
> matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the
> conditions and requirements of this title.

6-1)   Claims 18-27 are rejected under 35 U.S.C. 101 because the claimed invention is

directed to non-statutory subject matter. Claims 18-27 set forth non-functional

descriptive material but fail to set forth physical structures or materials comprising of

hardware or a combination of hardware and software within the technological arts (ie., a

computer) to produce a "useful, concrete and tangible" result. For example, claims 18-

27, the "method" reads on a mental construct/abstract idea or at best a computer

program, per se. The language "base document", etc., does not clearly define structural

elements and is not tangibly embodied on a computer readable medium. Claims 18-27

are interpreted as software per se, abstract ideas or mental construct and not tangibly

embodied on a computer readable medium or hardware.

Claim Rejections - 35 USC § 102

7)   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –(e) the invention was described in (1) an application for
> patent, published under section 122(b), by another filed in the United States before the invention by
> the applicant for patent or (2) a patent granted on an application for patent by another filed in the
> United States before the invention by the applicant for patent, except that an international application
> filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of
> an application filed in the United States only if the international application designated the United
> States and was published under Article 21(2) of such treaty in the English language.

7-1)   Claims 1-27, 34-58 are rejected under 35 U.S.C. 102(e) as being anticipated

by Schilit et al (US 6687876, filed Dec 30, 1998).

Regarding independent claims 1 and 34, Schilit teaches *creating a first context node*

associated with a first portion of a base portion of an electronic document; creating a

second context node associated with an annotation to the base portion; and linking the

second context node with the first context node. Schilit discloses a method for

maintaining freeform ink annotations on changing views (Title), where layout

relationships between the annotations and the associated objects are maintained (col 2,

lines 57- 65) where a user using a hyperbolic browser makes a digital ink annotation on

a node of a tree (col 3, lines 3-6; col 4, lines 45-54)(compare with the claimed first

context node). Additionally, the relationship is between the ink annotations and objects

in a view in the document (col 4, lines 45-54)(compare with claimed second context

node). The system maintains the logical relationship between the freeform digital

annotation and the object (col 4, lines 50-54)(compare with claimed the claimed linking)

and maps the annotation to the text objects that they are on (col 7, lines 55-60).

Regarding claims 2 and 35, Schilit teaches the first context node a word node. Schilit

discloses annotated word (col 7, lines 30-32).

Regarding claims 3, 20, 36 and 52, Schilit teaches wherein the first context node an

ink drawing node. Schilit discloses annotations that are circles, margin notes,

underlines/cross-outs (col 7, lines 50-57).

Regarding claims 4 and 37, Schilit teaches second context node is a group node.

Schilit discloses grouping ink strokes on text to form a single freeform digital ink

annotation (col 7, lines 48-51).

Regarding claims 5 and 38, Schilit teaches annotation to the base portion includes

electronic ink data. Schilit discloses freeform digital ink on the document (col 4, lines 50-

54).

Regarding claims 6 and 39, Schilit teaches the base portion is electronic text. Schilit

discloses underlying text objects (col 4, line 67-col 5, line 1) and object are the text

characters (col 5, lines 30-34; Fig 3A; 3B).

Regarding claims 7 and 40, parsing at least the first portion of the base portion to

thereby identify information for inclusion in the first context node. The Examiner

interprets this claim limitation to mean parsing performed as a classification process to

identify a stroke type, specifically to determine whether an electronic ink stroke is part of

a drawing or handwritten text, in order to group ink strokes into meaningful associations

such as lines, words and paragraphs (see specification, page 2, paragraph 4). Schilit

discloses a control routine that groups ink strokes into various categories (col 10, lines

15-20), by acquiring the region in the view that corresponds to the current character (col 10, lines 65-67) and acquires a position corresponding to the current character position prior to setting the character position (col 11, lines 30-33), which the Examiner interprets as the same functionality as the claimed limitation.

Regarding claims 8 and 41, Schilit teaches parsing at least the annotation to thereby identify information for inclusion in the second context node. Schilit discloses, by acquiring the region in the view that corresponds to the current character (col 10, lines 65-67) and acquires a position corresponding to the current character position prior to setting the character position (col 11, lines 30-33), which the Examiner interprets as the same functionality as the claimed limitation.

Regarding claims 9 and 42, Schilit teaches prior to parsing the annotation, the annotation includes at least one unclassified ink node. Schilit discloses unanchored segments of the freeform digital ink that will stretch to fit between the anchored points (col 6, lines 15-17), where the process first receives freeform digital ink annotations prior to anchoring them to the view (col 6, lines 46-49).

Regarding claims 10, 24 and 43, Schilit teaches rendering the base portion and the annotation, wherein the annotation is located at a first position with respect to the base portion; changing data associated with the base portion such that a location associated with the first context node changes to a second position; and rendering the annotation and the base portion with the changed data, wherein the annotation is rendered at a third position with respect to the base portion at least in part based on the second position of the first context node.

First, The Examiner interprets this claim to mean changing the location of a base portion of the document that has attached ink annotations to another location and maintaining the logical connection of the ink annotation to the changed base portion of the changed portion in it's new location.

Schilit discloses a method that moves the anchor points if the underlying anchored object moves (col 6, lines 13-14) where the document view is updated when the document changes and the maintained mapping of the ink annotation is used to render the ink annotation on the changed object view (col 6, lines 60-63). The logical relationship between freeform digital ink annotation and the objects is maintained (col 3, line 10-13) and the objects can be copied or moved along with the logical relationship with the annotation (col 3, lines 17-34).

Regarding claims 11 and 44, Schilit teaches the first context node and the second context node are arranged in a hierarchical data structure representing data associated with the electronic document. Schilit discloses a logical relationship between ink annotations and objects which are arranged on nodes of a tree (col 2, line 65 – col 3, lines 9). A tree of nodes representation is interpreted as a hierarchy data structure.

Regarding claims 12 and 45, Schilit teaches the first context node and the second context node share at least one common parent node. Schilit discloses that the annotation flows along with the underlying text objects in a logical relationship (col 4, line 66 – col 5, line 3). The Examiner interprets the annotation and text object are in a parent child relationship because the text object is under the annotation.

Regarding claims 13 and 46, Schilit teaches data associated with the first context

node and the second context node enable the electronic document to be rendered such

that the annotation contains the first portion of the base document. Schilit teaches a

circle annotation that is anchored to the span of words that is encircled by the circle (col

5, lines 49-52; Fig 3A, item 68).

Regarding claims 14 and 47, Schilit teaches data associated with the first context

node and the second context node enable the electronic document to be rendered such

that the annotation underlines the first portion of the base document. Schilit discloses

underline annotations underneath the text and are mapped to the text objects that they

are underneath 9col 7, lines 55-60).

Regarding claims 15 and 48, Schilit teaches data associated with the first context

node and the second context node enable the electronic document to be rendered such

that the annotation strikes out the first portion of the base document.   Schilit discloses

cross-out annotations directly on the text and are mapped to the text objects that they

are on (col 7, lines 55-60).

Regarding claims 16 and 49, Schilit teaches data associated with the first context

node and the second context node enable the electronic document to be rendered such

that a first portion of the annotation points between a second portion of the annotation

and the first portion of the base document. Schilit teaches (see Fig 3A) a document

having digital ink annotations (item 56) that includes a circle connected to an arrow

where the tip of the arrow is anchored to it's end point while the line connecting the

circle and the tip of the arrow is not anchored (col 5, lines 48-53). The Examiner

interprets that the tip of the arrow points to another portion of the document that is

between the annotation (the circle 68) and the base document (item 66).

Regarding claims 17 and 27, Schilit teaches a computer-executable instructions

stored thereon for performing the method of claim 1. Schilit discloses a programmed

general purpose computer to implement the system (col 4, lines 18-28).

Regarding independent claims 18 and 50, Schilit teaches *first data set containing*

data associated with a base document; a second data set that includes unclassified

electronic ink data; and linking at least some portion of the second data set with at least

some portion of the first data set. Schilit discloses a method for maintaining freeform

ink annotations on changing views (Title), where layout relationships between the

annotations and the associated objects are maintained (col 2, lines 57-65) where a

user using a hyperbolic browser makes a digital ink annotation on a node of a tree (col

3, lines 3-6; col 4, lines 45-54)(compare with the claimed first context node).

Additionally, the relationship is between the ink annotations and objects in a view in the

document (col 4, lines 45-54)(compare with claimed second context node). The system

maintains the logical relationship between the freeform digital annotation and the object

(col 4, lines 50-54)(compare with claimed the claimed linking) and maps the annotation

to the text objects that they are on (col 7, lines 55-60).

For the parsing portion of the limitation, The Examiner interprets this claim

limitation to mean parsing performed as a classification process to identify a stroke type,

specifically to determine whether an electronic ink stroke is part of a drawing or

handwritten text, in order to group ink strokes into meaningful associations such as

lines, words and paragraphs (see specification, page 2, paragraph 4). Schilit discloses

a control routine that groups ink strokes into various categories (col 10, lines 15-20), by acquiring the region in the view that corresponds to the current character (col 10, lines 65-67) and acquires a position corresponding to the current character position prior to setting the character position (col 11, lines 30-33), which the Examiner interprets as the same functionality as the claimed limitation.

Regarding claims 19 and 51, Schilit teaches the first context node a text word node. Schilit discloses annotated word (col 7, lines 30-32).

Regarding claims 21 and 53, Schilit teaches during the linking, the first context node of the first parsed data set is linked with the first context node of the second parsed data set. Schilit discloses a logical mapping relationship between the ink annotations and the text object of the document (col 4, lines 50-54; col 6, lines 45-50).

Regarding claims 22 and 54, Schilit teaches parsing the first data set results in a hierarchical arrangement of context nodes associated with the base document. Schilit disclose mapping may be to hierarchical objects structures 9col 8, lines 30-35).

Regarding claims 23 and 55, Schilit teaches parsing the second data set results in a hierarchical arrangement of context nodes associated with an annotation to the base document. Schilit disclose mapping may be to hierarchical objects structures 9col 8, lines 30-35), where an ink annotation can be split into a substroke or segments such that each substroke corresponds to a single character or to a position between characters (col 8, lines 50-55).

Regarding claim 56, which claims substantially similar subject matter as claim 24 and is rejected under similar lines of rejection as the rejection of claim 24, above.

Regarding claims 25 and 57, Schilit teaches parsing the first data set and parsing the

second data set results in a hierarchical arrangement of context nodes associated with

the first data set and the second data set.   Schilit disclose mapping may be to

hierarchical objects structures 9col 8, lines 30-35), where an ink annotation can be split

into a substroke or segments such that each substroke corresponds to a single

character or to a position between characters (col 8, lines 50-55).

Regarding claims 26 and 58, Schilit teaches at least one context node associated with

the first data set shares at least one common parent node with at least one context

node associated with the second data set. Schilit discloses that the annotation flows

along with the underlying text objects in a logical relationship (col 4, line 66 – col 5, line

3). The Examiner interprets the annotation and text object are in a parent child

relationship because the text object is under the annotation.

Relevant Art Considered by not cited

Nonpatent Literature "Robust Annotation Positioning in Digital Documents" by A.J.

Bernheim Brush, David Bargeron, Anoop Gupta and JJ Cadiz (see IDS, 4/2006).
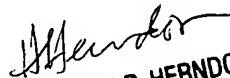
Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Gautam Sain whose telephone number is 571-272-

4096. The examiner can normally be reached on M-F 9-5 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Heather Herndon can be reached on 571-272-4136. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

GS

HEATHER R. HERNDON
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100